
Sequence Listing was accepted.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=8; day=18; hr=12; min=11; sec=44; ms=779;]

Validated By CRFValidator v 1.0.3

Application No: 10586348 Version No: 1.0

Input Set:

Output Set:

Started: 2008-08-15 16:52:32.577

Finished: 2008-08-15 16:52:35.615

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 38 ms

Total Warnings: 13

Total Errors: 5

No. of SeqIDs Defined: 18

Actual SeqID Count: 18

Error code		Error Description
E	320	Wrong Nucleic Acid Designator, gg in SEQID (1)
Ε	320	Wrong Nucleic Acid Designator, ac in SEQID (1)
Ε	320	Wrong Nucleic Acid Designator, cc in SEQID (1)
E	320	Wrong Nucleic Acid Designator, cg in SEQID (1)
W	213	Artificial or Unknown found in <213> in SEQ ID (4)
W	213	Artificial or Unknown found in <213> in SEQ ID (5)
W	213	Artificial or Unknown found in <213> in SEQ ID (6)
W	213	Artificial or Unknown found in <213> in SEQ ID (7)
W	213	Artificial or Unknown found in <213> in SEQ ID (8)
W	213	Artificial or Unknown found in <213> in SEQ ID (9)
W	213	Artificial or Unknown found in <213> in SEQ ID (10)
W	213	Artificial or Unknown found in <213> in SEQ ID (11)
W	213	Artificial or Unknown found in <213> in SEQ ID (12)
W	213	Artificial or Unknown found in <213> in SEQ ID (13)
W	213	Artificial or Unknown found in <213> in SEQ ID (14)
W	402	Undefined organism found in <213> in SEQ ID (17)
E	320	Wrong Nucleic Acid Designator, gg in SEQID (17)
W	402	Undefined organism found in <213> in SEQ ID (18)

SEQUENCE LISTING

```
<110> ALVES, ALEXANDRA M.C.R.
     RECORD, ERIC
      LOMASCOLO, ANNE
      SIGOILLOT, JEAN-CLAUDE
      ASTHER, MARCEL
      WOSTEN, HAN A.B.
<120> METHOD FOR OVERPRODUCING A SPECIFIC RECOMBINANT PROTEIN
      WITH P. CINNABARINUS MONOKARYOTIC STRAINS
<130> 0508-1167
<140> 10586348
<141> 2008-08-15
<150> PCT/FR05/000093
<151> 2005-01-14
<150> FR 04/00366
<151> 2004-01-15
<160> 18
<170> PatentIn Ver. 3.3
<210> 1
<211> 3330
<212> DNA
<213> Pycnoporus cinnabarinus
<220>
<221> CDS
<222> (128)..(310)
<220>
<221> CDS
<222> (368)..(436)
<220>
<221> CDS
<222> (490)..(610)
<220>
<221> CDS
<222> (664)..(777)
<220>
<221> CDS
<222> (833)..(896)
<220>
<221> CDS
```

<222> (960)..(1055)

```
<220>
<221> CDS
<222> (1114)..(1270)
<220>
<221> CDS
<222> (1334)..(1531)
<220>
<221> CDS
<222> (1592)..(1648)
<220>
<221> CDS
<222> (1705)..(1911)
<220>
<221> CDS
<222> (1968)..(2255)
<400> 1
ctgcagacat ctggagcgcc tgtctttccc ctagtataaa tgatgtctgt ccgcaggtcc
ttgaagaccg ctcgagtccc acttgagttt taggtaggac ctgtccacca aacccctctt
                                                                      120
totgate atg teg agg tte eag tee ete tte tte gte ete gte tee
                                                                      169
       Met Ser Arg Phe Gln Ser Leu Phe Phe Phe Val Leu Val Ser
                        5
ctc acc gct gtg gcc aac gca gcc ata ggg cct gtg gcg gac ctg acc
                                                                      217
Leu Thr Ala Val Ala Asn Ala Ala Ile Gly Pro Val Ala Asp Leu Thr
ctt acc aat gcc cag gtc agc ccc gat ggc ttc gct cgc gag gcc gtc
                                                                      265
Leu Thr Asn Ala Gln Val Ser Pro Asp Gly Phe Ala Arg Glu Ala Val
                35
                                    40
gtg gtg aac ggt atc acc cct gcc cct ctc atc aca ggc aat aag
                                                                      310
Val Val Asn Gly Ile Thr Pro Ala Pro Leu Ile Thr Gly Asn Lys
            50
                               55
gtatgtatat gctgctcgtc cctcagagct acatacatct gatccacaat cgtttag
                                                                      367
ggc gat cga ttc cag ctc aat gtc atc gac cag ttg aca aat cat acc
                                                                      415
Gly Asp Arg Phe Gln Leu Asn Val Ile Asp Gln Leu Thr Asn His Thr
            65
                                7.0
                                                    75
atg ttg aaa aca tct agt att gtaagggttc agtttttccc gactaccatg
                                                                      466
Met Leu Lys Thr Ser Ser Ile
       80
ttattgacca tcaccactcg tag cat tgg cac ggc ttc ttc cag caa ggc acg
                                                                      519
                          His Trp His Gly Phe Phe Gln Gln Gly Thr
                          85
aac tgg gcc gat ggt ccc gcg ttc gtg aac cag tgt ccc atc gct tcg
                                                                      567
Asn Trp Ala Asp Gly Pro Ala Phe Val Asn Gln Cys Pro Ile Ala Ser
95
                    100
                                       105
                                                            110
```

Gly His Ser Phe Leu Tyr Asp Phe Gln Val Pro Asp Gln Ala 115 120	610
gtacgaattc cgtacacgtt tcattgcgtc gcaactaaac ctcctcttac tag gg Gly 125	665
act ttc tgg tac cat agc cat ctc tcc acg caa tac tgc gat ggt ttg Thr Phe Trp Tyr His Ser His Leu Ser Thr Gln Tyr Cys Asp Gly Leu 130 135 140	713
agg ggg cct ttc gtc gtc tac gac ccc aac gat cct cac gct agc ctg Arg Gly Pro Phe Val Val Tyr Asp Pro Asn Asp Pro His Ala Ser Leu 145 150 155	761
tat gac att gat aac g gtgagcagat catggtatcg caatattgcg tccacttatg Tyr Asp Ile Asp Asn 160	817
cttcctggca tccag ac gac act gtc att acg ctg gct gat tgg tat cac Asp Asp Thr Val Ile Thr Leu Ala Asp Trp Tyr His 165 170	867
gtt gct gcc aag ctc gga cct cgc ttc cc gtacgtgtca aatgtctacg Val Ala Ala Lys Leu Gly Pro Arg Phe Pro 175 180	916
agagatetea eatataegae tagaeteaet tegetgatta eag a tit gge tee gat Phe Gly Ser Asp 185	972
Phe Gly Ser Asp	972
Phe Gly Ser Asp 185 tca acc ctt atc aat gga ctt ggt cga acc act ggc ata gca ccg tcc Ser Thr Leu Ile Asn Gly Leu Gly Arg Thr Thr Gly Ile Ala Pro Ser	
Phe Gly Ser Asp 185 tca acc ctt atc aat gga ctt ggt cga acc act ggc ata gca ccg tcc Ser Thr Leu Ile Asn Gly Leu Gly Arg Thr Thr Gly Ile Ala Pro Ser 190 195 200 gac ttg gca gtt atc aag gtc acg cag ggc aag cg gtaagtatgg Asp Leu Ala Val Ile Lys Val Thr Gln Gly Lys Arg	1020
Phe Gly Ser Asp 185 tca acc ctt atc aat gga ctt ggt cga acc act ggc ata gca ccg tcc Ser Thr Leu Ile Asn Gly Leu Gly Arg Thr Thr Gly Ile Ala Pro Ser 190 195 200 gac ttg gca gtt atc aag gtc acg cag ggc aag cg gtaagtatgg Asp Leu Ala Val Ile Lys Val Thr Gln Gly Lys Arg 205 210 215 atggtcatca ctgcacattg gctctgatac atggccttgt ttccacag c tac cgc	1020
Phe Gly Ser Asp 185 tca acc ctt atc aat gga ctt ggt cga acc act ggc ata gca ccg tcc Ser Thr Leu Ile Asn Gly Leu Gly Arg Thr Thr Gly Ile Ala Pro Ser 190 195 200 gac ttg gca gtt atc aag gtc acg cag ggc aag cg gtaagtatgg Asp Leu Ala Val Ile Lys Val Thr Gln Gly Lys Arg 205 210 215 atggtcatca ctgcacattg gctctgatac atggccttgt ttccacag c tac cgc Tyr Arg ttc cgc ttg gtg tcg ctt tct tgc gat ccg aac cat aca ttc agc att Phe Arg Leu Val Ser Leu Ser Cys Asp Pro Asn His Thr Phe Ser Ile	1020 1065 1120

	gtg Val	gtag	ggtec	gta	ggct	cctgt	c at	caaq	gttt	g caq	gacat	tct	taga	atac	acc	1320
ttti	ttcaa	atg d	_	Leu.	gat q Asp <i>I</i> 270	_	-	_	Pro V		_			Гrр		1369
_	-			_	ttc Phe						-					1417
	_		-	_	tat Tyr	_		_						_		1465
_	_				acg Thr	_		_			-	_	_			1513
	tcg Ser 330		_		gtg Val	gtad	cgtgt	ct o	caaaç	gaaco	ct co	gatca	actaa	ā		1561
gtg	catgt	ica a	actca	atat	gg tọ	gcato	gacaç	-	Gl	_		_	_	o Gl	a ggt y Gly	1615
-	-	-		_	aac Asn	_	-				gtga	agta	ctg (gege	gcttcc	1668
gtad	gcaca	acg t	tega	aaca	aa go	cctga	ataco	c ato	gcag		ggc Gly 355					1722
		_			ttt Phe 365	_	-	_		-		-	_			1770
		_			cag Gln		-	_	_	_	_	_			=	1818
		-			agc Ser		-								-	1866
	-		_		gga Gly				_			_				1911
gta	cgtct	ige o	ettec	ccct	cg to	ctaaa	aggc	g gaq	gtcga	atat	ctga	actc	cca t	cac	ag cac His	1970

Ala Phe Ala Val Val Arg Ser Ala Gly Ser Ser Val Tyr Asn Tyr Asp 425 430 435	
aac ccg atc ttc cgc gac gtc gtc agc acc ggc cag ccc ggc gac aacAsn Pro Ile Phe Arg Asp Val Val Ser Thr Gly Gln Pro Gly Asp Asn440445	2066
gtc acg att cgc ttc gag acc aat aac cca ggc ccg tgg ttc ctc cac Val Thr Ile Arg Phe Glu Thr Asn Asn Pro Gly Pro Trp Phe Leu His 460 465 470	2114
tgc cac att gac ttc cac ctc gac gca ggc ttt gct gta gtc atg gcc Cys His Ile Asp Phe His Leu Asp Ala Gly Phe Ala Val Val Met Ala 475 480 485	2162
gag gac act ccg gac acc aag gcc gcg aac cct gtt cct cag gcg tgg Glu Asp Thr Pro Asp Thr Lys Ala Ala Asn Pro Val Pro Gln Ala Trp 490 495 500	2210
tcg gac ttg tgc ccc atc tat gat gca ctt gac ccc agc gac ctc Ser Asp Leu Cys Pro Ile Tyr Asp Ala Leu Asp Pro Ser Asp Leu 505 510 515	2255
tgagegggat tgttactgtg acetggtgtg gggggaacat gtegaggget tteategate agggaettte aaggttggea taatatacet caeggeetgg atgaetegga cagegtgtgg gegtgggtgt aactetgett gatgttgaaa aaaggatttt atgtagaaca atttatgage aateageaat caataggatt gtgteggttt egaegaaatg tettgtee etgaeattae ttttgtgega gaaatgggte catgatacae ateattgage teteaataee aagaaggatt aceeatgtea ataceeaaga teatgette getgteegea atggteteat gttgggttga gggeatgeag aggeteaget egegetagge egaeetttge egaeagtegg egaeagtegg aggeatgeag acgtteaget egegetagga egegetegga egeegtgega egeegtgega egeegtgega egeegtgega egeeggggeaggetegga egegegggggggggg	2315 2375 2435 2495 2555 2615 2675 2735 2795 2855 2915 2975 3035 3095 3155 3215 3275 3330
<pre><210> 2 <211> 518 <212> PRT <213> Pycnoporus cinnabarinus <400> 2 Met Ser Arg Phe Gln Ser Leu Phe Phe Phe Val Leu Val Ser Leu Thr 1</pre>	

Asn Ala Gln Val Ser Pro Asp Gly Phe Ala Arg Glu Ala Val Val Val 35 40 45

Asn	Gly 50	Ile	Thr	Pro	Ala	Pro 55	Leu	Ile	Thr	Gly	Asn 60	Lys	Gly	Asp	Arg
Phe 65	Gln	Leu	Asn	Val	Ile 70	Asp	Gln	Leu	Thr	Asn 75	His	Thr	Met	Leu	Lys
Thr	Ser	Ser	Ile	His 85	Trp	His	Gly	Phe	Phe 90	Gln	Gln	Gly	Thr	Asn 95	Trp
Ala	Asp	Gly	Pro 100	Ala	Phe	Val	Asn	Gln 105	Суз	Pro	Ile	Ala	Ser 110	Gly	His
Ser	Phe	Leu 115	Tyr	Asp	Phe	Gln	Val 120	Pro	Asp	Gln	Ala	Gly 125	Thr	Phe	Trp
Tyr	His 130	Ser	His	Leu	Ser	Thr 135	Gln	Tyr	Cys	Asp	Gly 140	Leu	Arg	Gly	Pro
Phe 145	Val	Val	Tyr	Asp	Pro 150	Asn	Asp	Pro	His	Ala 155	Ser	Leu	Tyr	Asp	Ile 160
Asp	Asn	Asp	Asp	Thr 165	Val	Ile	Thr	Leu	Ala 170	Asp	Trp	Tyr	His	Val 175	Ala
Ala	Lys	Leu	Gly 180	Pro	Arg	Phe	Pro	Phe 185	Gly	Ser	Asp	Ser	Thr 190	Leu	Ile
Asn	Gly	Leu 195	Gly	Arg	Thr	Thr	Gly 200	Ile	Ala	Pro	Ser	Asp 205	Leu	Ala	Val
Ile	Lys 210	Val	Thr	Gln	Gly	Lys 215	Arg	Tyr	Arg	Phe	Arg 220	Leu	Val	Ser	Leu
Ser 225	Суз	Asp	Pro	Asn	His 230	Thr	Phe	Ser	Ile	Asp 235	Asn	His	Thr	Met	Thr 240
Ile	Ile	Glu	Ala	Asp 245	Ser	Ile	Asn	Thr	Gln 250	Pro	Leu	Glu	Val	Asp 255	Ser
Ile	Gln	Ile	Phe 260	Ala	Ala	Gln	Arg	Tyr 265	Ser	Phe	Val	Leu	Asp 270	Ala	Ser
Gln	Pro	Val 275	Asp	Asn	Tyr	Trp	Ile 280	Arg	Ala	Asn	Pro	Ala 285	Phe	Gly	Asn
Thr	Gly 290	Phe	Ala	Gly	Gly	Ile 295	Asn	Ser	Ala	Ile	Leu 300	Arg	Tyr	Asp	Gly
Ala 305	Pro	Glu	Ile	Glu	Pro 310	Thr	Ser	Val	Gln	Thr 315	Thr	Pro	Thr	Lys	Pro 320
Leu	Asn	Glu	Val	Asp 325	Leu	His	Pro	Leu	Ser 330	Pro	Met	Pro	Val	Pro 335	Gly
Ser	Pro	Glu	Pro	Gly	Gly	Val	Asp	Lys	Pro	Leu	Asn	Leu	Val	Phe	Asn

Phe Asn Gly Thr Asn Phe Phe Ile Asn Asp His Thr Phe Val Pro Pro 355 360 365

Ser Val Pro Val Leu Leu Gln Ile Leu Ser Gly Ala Gln Ala Ala Gln 370 375 380

Asp Leu Val Pro Glu Gly Ser Val Phe Val Leu Pro Ser Asn Ser Ser 385 390 395 400

Ile Glu Ile Ser Phe Pro Ala Thr Ala Asn Ala Pro Gly Phe Pro His 405 410 415

Pro Phe His Leu His Gly His Ala Phe Ala Val Val Arg Ser Ala Gly
420 425 430

Ser Ser Val Tyr Asn Tyr Asp Asn Pro Ile Phe Arg Asp Val Val Ser 435 440 445

Thr Gly Gln Pro Gly Asp Asn Val Thr Ile Arg Phe Glu Thr Asn Asn 450 455 460

Pro Gly Pro Trp Phe Leu His Cys His Ile Asp Phe His Leu Asp Ala 465 470 475 480

Gly Phe Ala Val Val Met Ala Glu Asp Thr Pro Asp Thr Lys Ala Ala 485 490 495

Asn Pro Val Pro Gln Ala Trp Ser Asp Leu Cys Pro Ile Tyr Asp Ala 500 505 510

Leu Asp Pro Ser Asp Leu 515

<210> 3

<211> 2527

<212> DNA

<213> Pycnoporus cinnabarinus

<400> 3

agatetecga accagaaatg cgattgcgtt caggeccaat taagaataaa getgegteag 60 ggcagcgacg tatettgate cateattgae teaceggeat eggegteaae accaaageaa 120 getegtecea eccataggeg tgeaceggee ggegtegee attgaggtae atgagegggg 180 eggaaagteeg ecattggtag ecettgetgg gaeggegge gatgaaaegt tteecaceat 240 tgggaagaaa eggeeggge ecateateee tteaceggat gaeaaggegg egteggeet 300 ttgeegeaga ggeeggegg egaeatgeae agegaaggte egttgeggat gggaageagg 360 eaateagtgg gtgteetaeg eegeeaggat ggteggggag egttgegget geggegeet 300 eaateagtgg gtgteetaeg eegeeaegat ggteggggag egtaggegee eteecataag 420 geggeaagea teatgatget eteegattee ggaageetgg tgegatgetg gaggaaetet 480 eteegaaga eeagtgteg eaaegtteet ggeetggaag actttaaagt gagtgtagaa 540 gggegageag aggaegatea teggattgea ggaaeeateg geateeteag eetgggaagg 600 atggetettg gtagaeatte geggaaggtg teetagatg gageggett ettggatgat 660 eatgtegtaa etttteetga eeteeggt ggtaeegeatg geaggattga geattaeegg 720 atgeeteea tteataaaeg ataaeeeet eetteeggtt ggteatetee atagagegge 780 aegeteteaa ggeetagget atteaeaeet eetteegaae ateeetatte aeggtgteetg 840 taaggaaega ettgteatgg gateaeatga agtgeageat aetgteegea 900

tacagacget agtacggaa gtcgacatc aagcgttcag tcaccacatg gcaaaaaaagc 960 tgcaccatac tcttatggt gagttgttcg tgagtggtat acagtcattc atgagggaat 1020 gcccaccgga tagggtgtg cggccgcaat attcatcgcc tggcaatagt cgatgtgcg 1080 ccttgttcaa tgaatacat gggtcacatg tggagacggt